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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,681	03/21/2001	Heather Laudan Clark	LE9-00-068	3454

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EXAMINER

POON, KING Y

ART UNIT PAPER NUMBER

2624

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/813,681	Applicant(s) CLARK ET AL	
	Examiner King Y. Poon	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 10-13, 16, 17, 19-22, 25-28, 31 and 32 is/are rejected.
- 7) ☒ Claim(s) 1, 4, 8, 9, 14, 15, 18, 23, 24, 29 and 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 1 is objected to because of the following informalities: There are two step a) in claim 1. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5-7, 10-13, 16, 17, 19-22, 25-28, 31, 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Debry et al. (US 6,097,498) and Herzog et al (US 4,651,278)(incorporated by reference, column 1, lines 10-15, Debry).

Regarding claim 1: Debry teaches a method of transmitting print data (fig. 2) from a host (18, fig. 3) to a printing device (22, fig. 3, column 4, lines 44-48) for processing, comprising the steps of: (a) dividing the print data into separate data streams (fig. 2); (a) dividing the data streams into data segments (object container, column 6, lines 63-67, fig. 4); (b) compressing the data segments with a compression algorithm (page description language, column 4, lines 30-35; page description language

Art Unit: 2624

are compressed print data); (c) creating a print header (WOCC, column 9, line 30-35, column 11, lines 20-32, column 6, lines 35-37; also see column 7, 8 of Herzog) containing instructions for processing each data segment (column 8, lines 43-45, Herzog); (d) sending the print header from the host to a printing device (fig. 2, fig. 3); (e) sending the data segments from the host to a printing device (fig. 2, fig. 3); (f) decompressing the data segments (46, 48, fig. 3); (g) allocating printer memory space to store the decompressed data segment (column 5, lines 20-25; the output of the interpreter is added to one or more logical page; in doing so, the logical page must be stored (inherent) in a memory space); and (h) processing the decompressed data segments (44, fig. 3) according to the instructions contained in the print header to produce a printed item.

Regarding claim 2: Debry teaches wherein the step of compressing the data segments is performed using different compression algorithms for different segments (column 5, lines 10-25, column 4, lines 30-35).

Regarding claim 3: Debry teaches wherein a header is embedded within each data segment (column 11, lines 19-32), the header including information that describes the compression scheme (column 11, lines 25-28) employed.

Regarding claim 5: Debry teaches the step of allocating memory partitions according to the size of each uncompressed data segment, such that the size of the partition is similar to the size of the decompressed data segment. (inherent properties of storing data by a processor; if a processor is putting X amount of data into a memory, the processor is putting X amount of data into the memory space).

Regarding claim 6: Debry teaches the step of creating a print header further comprises the step of embedding within the print header information about the relative positions (column 5, lines 23-24, column 6, lines 36-37) of a color (column 7, line 56, Herzog) to be applied to a printing medium during the printing process.

Regarding claim 7: Debry teaches wherein the printing device is an inkjet printer (column 63, line 68, Herzog) with color (column 7, line 56, Herzog) capability.

Regarding claim 10: Debry teaches a method of transmitting print data (fig. 2) from a host (18, fig. 3) to a printing device (22, fig. 3, column 4, lines 44-48) for processing, comprising the steps of: (a) dividing the print data into separate data streams (fig. 2); (b) dividing the data streams into data segments (object container, column 6, lines 63-67, fig. 4); (c) creating a print header (WOCC, column 9, line 30-35, column 11, lines 20-32, column 6, lines 35-37; also see column 7, 8 of Herzog) containing instructions for processing each data segment (column 8, lines 43-45, Herzog); (d) sending the print header from the host to a printing device (fig. 2, fig. 3); (e) sending the data segments from the host to a printing device (fig. 2, fig. 3); (f) allocating printer memory space to store the decompressed data segment (column 5, lines 20-25; the output of the interpreter is added to one or more logical page; in doing so, the logical page must be stored (inherent) in a memory space); and (g) processing the data segments (44, fig. 3) according to the instructions contained in the print header to produce a printed item.

Regarding claim 11: Debry teaches the step of creating a print header further

Art Unit: 2624

comprises the step of embedding within the print header information about the relative positions (column 5, lines 23-24, column 6, lines 36-37) of a color (column 7, line 56, Herzog) to be applied to a printing medium during the printing process.

Regarding claim 12: Debry teaches the step of allocating memory partitions according to the size of each data segment, such that the size of the partition is similar to the size of the decompressed data segment (inherent properties of storing data by a processor; if a processor is putting X amount of data into a memory, the processor is putting X amount of data into the memory space).

Regarding claim 13: Debry teaches wherein the printing device is an inkjet printer (column 63, line 68, Herzog) with color (column 7, line 56, Herzog) capability.

Regarding claim 16: Debry teaches a system (fig. 2, fig. 3) for processing print data comprising a print data host (18, fig. 3) wherein the print data host performs the steps of: (a) dividing the print data into separate data streams (fig. 2); (a) dividing the data streams into data segments (object container, column 6, lines 63-67, fig. 4); (b) compressing the data segments with a compression algorithm (page description language, column 4, lines 30-35; page description language are compressed print data); (c) creating a print header (WOCC, column 9, line 30-35, column 11, lines 20-32, column 6, lines 35-37; also see column 7, 8 of Herzog) containing instructions for processing each data segment (column 8, lines 43-45, Herzog); (d) sending the print header from the host to a printing device (fig. 2, fig. 3); (e) sending the data segments from the host to a printing device (fig. 2, fig. 3); and a printing device (22, fig. 3, column 4, lines 44-48), wherein the printing device performs the steps of (f) decompressing the

Art Unit: 2624

data segments (46, 48, fig. 3) received from the print data host; (g) allocating printer memory space to store the decompressed data segment (column 5, lines 20-25; the output of the interpreter is added to one or more logical page; in doing so, the logical page must be stored (inherent) in a memory space); and (h) processing the decompressed data segments (44, fig. 3) according to the instructions contained in the print header to produce a printed item.

Regarding claim 17: Debry teaches wherein the print data host compresses the data segments using different compression algorithms for different segments (column 5, lines 10-25, column 4, lines 30-35).

Regarding claim 19: Debry teaches wherein the print data host embeds a header in each data segment (column 11, lines 19-32), the header including information that describes the compression scheme (column 11, lines 25-28) employed.

Regarding claim 20: Debry teaches wherein the print data host embeds within the print header information about the relative positions (column 5, lines 23-24, column 6, lines 36-37) of each color (column 7, line 56, Herzog) to be applied to a printing medium during the printing process.

Regarding claim 21: Debry teaches wherein the printing device host (controller fig. 3) allocates memory partitions for storing decompressed data according to the size of each uncompressed data segment, such that the size of the partition is similar to the size of the decompressed data segment. (inherent properties of storing data by a processor; if a processor is putting X amount of data into a memory, the processor is putting X amount of data into the memory space).

Regarding claim 22: Debry teaches wherein the printing device is an inkjet printer (column 63, line 68, Herzog) with color (column 7, line 56, Herzog) capability.

Regarding claim 25: Debry teaches a system (fig. 2, fig. 3) for processing print data comprising a print data host (18, fig. 3) wherein the print data host performs the steps of: (a) dividing the print data into separate data streams (fig. 2); (b) dividing the data streams into data segments (object container, column 6, lines 63-67, fig. 4); (c) creating a print header (WOCC, column 9, line 30-35, column 11, lines 20-32, column 6, lines 35-37; also see column 7, 8 of Herzog) containing instructions for processing each data segment (column 8, lines 43-45, Herzog); (d) sending the print header from the host to a printing device (fig. 2, fig. 3); (e) sending the data segments from the host to a printing device (fig. 2, fig. 3); a printing device performing the steps of (f) allocating printer memory space to store the decompressed data segment (column 5, lines 20-25; the output of the interpreter is added to one or more logical page; in doing so, the logical page must be stored (inherent) in a memory space); and (g) processing the data segments (44, fig. 3) according to the instructions contained in the print header to produce a printed item.

Regarding claim 26: Debry teaches the print hosts embeds within the print header information about the relative positions (column 5, lines 23-24, column 6, lines 36-37) of a color (column 7, line 56, Herzog) to be applied to a printing medium during the printing process.

Regarding claim 27: Debry teaches the print device allocates memory for storing data according to the size of each data segment, such that the size of the partition is



Art Unit: 2624

similar to the size of the decompressed data segment. (inherent properties of storing data by a processor; if a processor is putting X amount of data into a memory, the processor is putting X amount of data into the memory space).

Regarding claim 28: Debry teaches wherein the printing device is an inkjet printer (column 63, line 68, Herzog) with color (column 7, line 56, Herzog) capability.

Regarding claims 31, 32: Debry teaches a system (fig. 2, fig. 3) for processing print data comprising a print data host (18, fig. 3) wherein the print data host performs the steps of: (a) dividing the print data into separate data streams (fig. 2); (a) dividing the data streams into data segments (object container, column 6, lines 63-67, fig. 4); (b) compressing the data segments with a compression algorithm (page description language, column 4, lines 30-35; page description language are compressed print data); (c) creating a print header (WOCC, column 9, line 30-35, column 11, lines 20-32, column 6, lines 35-37; also see column 7, 8 of Herzog) containing instructions for processing each data segment (column 8, lines 43-45, Herzog); (d) sending the print header from the host to a printing device (fig. 2, fig. 3); (e) sending the data segments from the host to a printing device (fig. 2, fig. 3); and a printing device (22, fig. 3, column 4, lines 44-48), wherein the printing device performs the steps of (f) decompressing the data segments (46, 48, fig. 3) received from the print data host; and (g) processing the decompressed data segments (44, fig. 3) according to the instructions contained in the print header to produce a printed item.

Art Unit: 2624

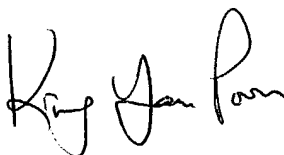
***Allowable Subject Matter***

3. Claims 4, 8, 9, 14, 15, 18, 23, 24, 29, 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892

October 21, 2004

A handwritten signature in black ink, appearing to read 'King Y. Poon', written in a cursive style.

KING Y. POON  
PRIMARY EXAMINER